# Research Experience in Carbon Sequestration

## U.S. Department of Energy

RECS, Research Experience in Carbon Sequestration is a first of-its-kind, high-level summer research program on carbon sequestration. It is designed to engage undergraduates, graduates and early career professionals in carbon sequestration science through hands-on field work and data analysis with leading U.S. scientists. During this summer research experience, students will have the opportunity to:

- Tap the expertise of over 20 nationally and internationally recognized faculty members
- Conduct hands on research and apply new technologies in the field to advance carbon sequestration science
- Network with other young professionals who have similar research interests
- Explore career opportunities with representatives from industry and leading research organizations including national labs and universities
- Help establish U.S. excellence in the field

### Program Description

The program will primarily focus on the theory, fundamentals and technical issues associated with geologic carbon storage but will also address $CO_2$ monitoring and mitigation and carbon capture. The program will be divided into four parts:

- Theory — attend seminar overview of the fundamentals and key themes in carbon sequestration science,
- Field-Work — conduct hands on field work at well designed carbon sequestration sites to gather data,
- Analysis, Integration and Presentation — analyze, integrate and present research findings to the group,
- Feedback — obtain feedback on research methods and findings from peers and leading U.S. scientists

### Who Attends RECS

Undergraduate and graduates interested in a comprehensive summer research experience in carbon sequestration. Related fields may include geophysics, geology, geochemistry, chemistry, biogeochemistry, atmospheric chemistry, engineering, economics and law.

Early career professionals including engineers, geologists, geophysicists, geochemists, college and university faculty and postdoctoral fellows.

RECS will build on a 10-day CO2 research program that was held in August 2004 at St. John's College in Santa Fe, NM for 20 students representing the U.S. and Norway. During the program, participants traveled to Kinder Morgan Co.'s SACROC CO2 facility in Midland, TX where CO2 is used to enhance oil recovery (EOR) from depleted oil reserviors. EOR is considered a near-term CO2 storage option and issues associated with CO2 EOR and carbon storage will be explored in RECS 2005.

### Application

Applicants should have general knowledge of carbon sequestration science with a background in chemistry, geology, and physics. Applicants engaged in engineering, law or economics are also welcome to apply but should have some science background. RECS particulatrly welcomes applicants interested in pursuing the field of carbon sequestration science or its application to the energy industry.

The RECS application form may be found at: http://recs.lanl.gov/index.shtml

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